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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,803	08/17/2006	Tsunenori Arai	081356-0266	2407
22428 7590 08/02/2010 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER LIPTIZ, JEFFREY BRIAN	
			ART UNIT 3769	PAPER NUMBER
			MAIL DATE 08/02/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/589,803

Applicant(s)

ARAI ET AL.

Examiner

JEFFREY B. LIPITZ

Art Unit

3769

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2010 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's amended drawings filed June 14 have been fully considered but they are not persuasive. Figures 2 and 7 are still not of sufficient quality. The last Figure 8 included in the drawings submitted June 14, 2010 is accepted. The drawing objection to Figure 8 has been withdrawn.

Applicant's arguments/amendments with respect to the prior art rejections have been fully considered but they are not persuasive. Applicant argues that Kittrell does NOT anticipate the claims because Applicant writes that the light conveying elements "consist essentially of" one or two pairings, while Examiner's cited embodiments have more than two pairs of fibers. Attention is directed to Figure 27, which illustrates only one optical fiber (Column 22, lines 31-48). This one optical fiber could be used or a fiber optic bundle consisting of two optical fibers could be used in its place (Column 13, Lines 14-20).

Applicant also argues that Kittrell does NOT teach the determination of an optical fiber's position relative to the tissue. However, Kittrell suggests using short pulses of light or acoustic energy for this purpose (Column 20, Lines 37-49).

The prior art rejections have largely been maintained.

Drawings

The drawings are objected to because Figures 2 and 7 are not of sufficient quality to identify any features. Corrected drawing sheets in compliance with 37 CFR 1.121 (d) are required in reply to the Office action to avoid abandonment of the

application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121 (d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kittrell et al. (4913142), hereinafter Kittrell.

Regarding claims 17, 18, 20 and 21, Kittrell teaches laser cauterization methods and apparatuses (Background and Summary of the Invention). The apparatus comprising: a laser or generator such as an argon laser, or a NG:YAG laser (Column 3, Lines 41; Column 7, Lines 40-56; Lines Column 24, Lines 60-69), a single optical fiber (20; Column 22, Lines 31-48; Figure 27) or optical fiber pair (Column 13, Lines 14-20), a beam splitter (50 or 52; Figures 21 and 22), and a detector (70 and 64), such as an array of photodiodes, configured to measure the intensity of backscattered light, and a computer (80) for determining the position of an end of the welding laser transmitting means or the distance to the tissue (Column 20, Lines 37-49). Kittrell teaches supplying diagnostic or monitoring light through a selected optical fiber (20a-c), where the light falls on the tissue and is absorbed and scattered. The light then re-enters the distal ends of the various fibers (20) where it travels to the proximal end to be analyzed by a detector (64). The light may be transmitted through the same optical fiber or a different one (Column 24, Lines 17-38). Kittrell teaches that the laser catheter (10) can be placed into a guide catheter (140; Figure 4) for placement in the body. Since the fibers are positioned in the laser catheter in all of the embodiments, they will inherently be positioned within the guide catheter or sheath.

Kittrell also teaches that the optical fibers deliver high power radiation, or alternatively that they deliver spectral diagnostic radiation, either from a laser or a convention light source (Column 9, Lines 5-14). In other words, either one light source can be used, or two separate ones (Figure 24).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kittrell.

Regarding claims 19 and 22, Kittrell teaches using two pairings, wherein the measuring light source is coupled to one fiber, while the welding light source goes to another. It would have been obvious to pair two different light sources each with its own fiber, because doing so enables undisturbed real-time measurements of spectral intensities during treatment of the tissue (Column 20, Lines 31-54; Column 21, Lines 17-29). If the two light sources were coupled to the same optical fiber, then in order to use the measurement light, which is far less intense than the treatment light, the treatment light would have to be temporarily blocked from entering the fiber.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY B. LIPITZ whose telephone number is (571)270-5612. The examiner can normally be reached on Monday to Thursday, 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry M. Johnson III can be reached on (571)272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JEFFREY B LIPITZ/
Examiner, Art Unit 3769

/Henry M. Johnson, III/
Supervisory Patent Examiner, Art
Unit 3769